What is Claimed is:

1. In a communication network wherein communication links become intermittently disabled, a communication unit to transmit and receive messages within said network comprising:

a communication device to transmit an outgoing message to at least one other communication unit within said network and to receive an incoming message from at least one other communication unit within said network; and

a routing device to route outgoing messages within said network to corresponding destination sites, wherein said routing device includes:

a protocol module to facilitate routing of messages within said network in accordance with a routing protocol, wherein said protocol module includes a network module to determine routes within said network for transmission of said outgoing messages to said corresponding destination sites, and wherein said routing protocol facilitates recomputation of said routes within said network by said network module in response to occurrence of a particular condition; and

a route generation module to establish said particular condition within said network prior to occurrence of disablement of a communication link to enable said network module to recompute said routes based on said communication link disablement and in response to said routing protocol.

2. The communication unit of claim 1, wherein said communication network is a satellite communication network and said communication unit is a satellite.

3. The communication unit of claim 1, wherein said communication network is a satellite communication network and said communication unit is a ground station.

4. The communication unit of claim 1, wherein said routing protocol is the OSPF routing protocol.

5. The communication unit of claim 1, wherein said protocol module periodically transmits neighbor packets in order to verify communication links with other communication units, and wherein said particular condition is the absence of transmission and reception of said neighbor packets within a corresponding interval.

6. The communication unit of claim 5, wherein said route generation module includes:

a prediction module to examine information associated with known changes of network topology and to predict occurrence of disablement of a communication link due to a known network topology change prior to actual disablement of that communication link; and

a filter module responsive to said prediction module to discard said neighbor packets received from or for transmission over said predicted communication link, wherein said discarding of neighbor packets establishes said particular condition and causes said network module to recompute routes within said network in response to said routing protocol.

7. The communication unit of claim 6, wherein said routing device includes a storage unit to store said information associated with said known network topology changes.

8. The communication unit of claim 6, wherein said prediction module includes:

a link enablement module to instruct said filter module to process said neighbor packets received from or for transmission over said predicted communication link in response to expiration of an interval subsequent disablement of said predicted communication link to facilitate detection of revival of said predicted communication link by said routing protocol.

9. A communication network comprising:

a plurality of communication units for transferring information, wherein communication links between said communication units become intermittently disabled and each said communication unit includes:

a routing device to route outgoing messages within said network to corresponding destination sites, wherein said routing device includes:

a protocol module to facilitate routing of messages within said network in accordance with a routing protocol, wherein said protocol module includes a network module to determine routes within said network for transmission of said outgoing messages to said corresponding destination sites, and wherein said routing protocol facilitates recomputation of said routes within said network by said network module in response to occurrence of a particular condition; and

a route generation module to establish said particular condition within said network prior to occurrence of disablement of a communication link to enable said

network module to recompute said routes based on said communication link disablement and in response to said routing protocol.

10. The communication network of claim 9, wherein a plurality of said communication units are satellites and at least one of said communication units is a ground station.

11. The communication network of claim 9, wherein said routing protocol is the OSPF routing protocol.

12. The communication network of claim 9, wherein said protocol module periodically transmits neighbor packets in order to verify communication links between communication units, and wherein said particular condition is the absence of transmission and reception of said neighbor packets within a corresponding interval.

13. The communication network of claim 12, wherein said route generation module includes:

a prediction module to examine information associated with known changes of network topology and to predict occurrence of disablement of a communication link due to a known network topology change prior to actual disablement of that communication link; and

a filter module responsive to said prediction module to discard said neighbor packets received from or for transmission over said predicted communication link, wherein said discarding of neighbor packets establishes said particular condition and causes said network module to recompute routes within said network in response to said routing protocol.

14. The communication network of claim 13, wherein said prediction module includes:

a link enablement module to instruct said filter module to process said neighbor packets received from or for transmission over said predicted communication link in response to expiration of an interval subsequent disablement of said predicted communication link to facilitate detection of revival of said predicted communication link by said routing protocol.

15. In a communication network including a plurality of communication units wherein communication links between communication units become intermittently disabled, a method of transmitting and receiving messages within said network comprising the steps of:

(a) routing outgoing messages within said network to corresponding destination sites in accordance with a routing protocol, wherein said routing includes determination of routes within said network and said routing protocol facilitates recomputation of said routes within said network in response to occurrence of a particular condition; and

(b) establishing said particular condition within said network prior to occurrence of disablement of a communication link to enable recomputation of said routes based on said communication link disablement and in response to said routing protocol.

16. The method of claim 15, wherein said communication network is a satellite communication network, and wherein a plurality of said communication units are satellites and at least one of said communication units is a ground station.

17. The method of claim 15, wherein said routing protocol is the OSPF routing protocol.

18. The method of claim 15, wherein said communication units periodically transmit neighbor packets in order to verify communication links with other communication units, wherein said particular condition is the absence of transmission and reception of said neighbor packets within a corresponding interval, and step (b) further includes:

(b.1) inhibiting transmission and reception of said neighbor packets by said communication units prior to occurrence of disablement of a communication link to enable recomputation of said routes based on said communication link disablement and in response to said routing protocol.

19. The method of claim 18, wherein step (b.1) further includes:

(b.1.1) examining information associated with known changes of network topology and predicting occurrence of disablement of a communication link due to a known network topology change prior to actual disablement of that communication link; and

(b.1.2) discarding said neighbor packets received from or for transmission over said predicted communication link in response to said prediction, wherein said discarding of neighbor packets establishes said particular condition and causes recomputation of said routes within said network in response to said routing protocol.

20. The method of claim 19, wherein step (b.1) further includes:

(b.1.3) processing said neighbor packets received from or for transmission over said predicted communication link in response to expiration of an interval subsequent disablement of said predicted communication link to facilitate detection of revival of said predicted communication link by said routing protocol.

21. In a communication network wherein communication links become intermittently disabled, a communication unit to transmit and receive messages within said network comprising:

communication means for transmitting an outgoing message to at least one other communication unit within said network and for receiving an incoming message from at least one other communication unit within said network; and

routing means for routing outgoing messages within said network to corresponding destination sites, wherein said routing means includes:

protocol means for facilitating routing of messages within said network in accordance with a routing protocol, wherein said protocol means includes network means to determine routes within said network for transmission of said outgoing messages to said corresponding destination sites, and wherein said routing protocol facilitates recomputation of said routes within said network by said network means in response to occurrence of a particular condition; and

route generation means for establishing said particular condition within said network prior to occurrence of disablement of a communication link to enable said network means to recompute said routes based on said communication link disablement and in response to said routing protocol.

22. The communication unit of claim 21, wherein said communication network is a satellite communication network and said communication unit is a satellite.

23. The communication unit of claim 21, wherein said communication network is a satellite communication network and said communication unit is a ground station.

24. The communication unit of claim 21, wherein said routing protocol is the OSPF routing protocol.

25. The communication unit of claim 21, wherein said protocol means includes message means for periodically transmitting neighbor packets in order to verify communication links with other communication units, and wherein said particular condition is the absence of transmission and reception of said neighbor packets within a corresponding interval.

26. The communication unit of claim 25, wherein said route generation means includes:

prediction means for examining information associated with known changes of network topology and for predicting occurrence of disablement of a communication link due to a known network topology change prior to actual disablement of that communication link; and

filter means responsive to said prediction means for discarding said neighbor packets received from or for transmission over said predicted communication link, wherein said discarding of neighbor packets establishes said particular condition and causes said network means to recompute routes within said network in response to said routing protocol.

27. The communication unit of claim 26, wherein said routing means includes storage means for storing said information associated with said known network topology changes.

28. The communication unit of claim 26, wherein said prediction means includes:

link enablement means for instructing said filter means to process said neighbor packets received from or for transmission over said predicted communication link in response to expiration of an interval subsequent disablement of said predicted communication link to facilitate detection of revival of said predicted communication link by said routing protocol.